

In the Claims

CLAIMS

Claims 1-8 (Canceled).

9. (Previously presented) A method of conductively interconnecting electronic components comprising:

providing a curable adhesive composition comprising an epoxy terminated glycidoxy methoxy silane;

providing first and second electronic components to be conductively connected with one another;

interposing the curable adhesive composition between the first and second electronic components, wherein at least one of the components comprises a nickel containing metal surface over which the curable adhesive composition is received;

curing the adhesive into an electrically conductive bond electrically interconnecting the first and second components; and

wherein the glycidoxy methoxy silane is present in the curable adhesive composition at less than or equal to about 2% by weight.

Claim 10-11 (Canceled).

12. (Original) The method of claim 9 wherein the epoxy terminated silane comprises a glycidoxypolytrimethoxysilane.

Claim 13 (Canceled).

14. (Original) The method of claim 9 wherein the epoxy terminated silane is present in the curable adhesive composition at less than or equal to about 1% by weight.

Claims 15-22 (Canceled).

23. (Previously presented) A method of conductively interconnecting electronic components comprising:

interposing a curable epoxy composition between first and second electrically conductive components to be electrically interconnected, at least one of the components comprising a battery having a metal surface with which the curable epoxy is to electrically connect; and

curing the epoxy into an electrically conductive bond electrically interconnecting the first and second components, the epoxy having an effective metal surface wetting concentration of silane to form a cured electrical interconnection having a contact resistance through said metal surface of less than or equal to about 0.3 ohm-cm².

24. (Original) The method of claim 23 wherein the epoxy has an effective metal surface wetting concentration of silane to form a cured electrical interconnection having a resistance through said metal surface of less than or equal to about 0.16 ohm-cm².

25. (Original) The method of claim 23 wherein the epoxy has an effective metal surface wetting concentration of silane to form a cured electrical interconnection having a resistance through said metal surface of less than or equal to about 0.032 ohm-cm².

26. (Original) The method of claim 23 wherein the metal surface wetting concentration of silane in the curable adhesive composition is less than or equal to about 2% by weight.

27. (Original) The method of claim 23 wherein the metal surface wetting concentration of silane in the curable adhesive composition is less than or equal to about 1% by weight.

28. (Original) The method of claim 23 wherein the metal surface comprises nickel over which the curable adhesive composition is received.

Claims 29-50 (Canceled).

51. (Previously presented) The method of claim 9 wherein the first electronic component comprises a first conductive node and the second electronic component comprises a second conductive node, wherein the first and second nodes comprise interfaces for the electrically interconnecting the first and second components, and wherein the interposing provides the curable adhesive composition interposed between the interfaces.

52. (Previously presented) The method of claim 51 wherein the curable adhesive composition contacts the interfaces.

53. (Previously presented) The method of claim 23 wherein the metal surface comprises a first conductive node of the first electronic component and the second electronic component comprises a second conductive node, wherein the first and second nodes comprise interfaces for the electrically interconnecting the first and second components, and wherein the interposing provides the curable epoxy composition interposed between the interfaces.

54. (Previously presented) The method of claim 53 wherein the curable epoxy composition contacts the metal surface and the second conductive node.

55. (Previously presented) The method of claim 9 wherein the curable adhesive composition comprises 0.5 to 2.0 weight parts of glycidoxy methoxy silane combined with 100 weight parts of silver epoxy resin.

56. (Previously presented) The method of claim 9 wherein the curable adhesive composition comprises 1 weight part of glycidoxy methoxy silane combined with 100 weight parts of silver epoxy resin.

57. (Previously presented) The method of claim 53 wherein the curable epoxy composition comprises 0.5 to 2.0 weight parts of silane combined with 100 weight parts of silver epoxy resin.

58. (Previously presented) The method of claim 57 wherein the curable epoxy composition comprises 1 weight part of silane.

59. (Previously presented) The method of claim 58 wherein the curable epoxy composition comprises 3 weight parts of hardener.

60. (Previously presented) The method of claim 9 wherein the nickel containing metal surface comprises nickel clad stainless steel.

61. (Previously presented) The method of claim 23 wherein the silane comprises epoxy terminated silane.

62. (Previously presented) The method of claim 23 wherein the silane comprises glycidoxymethoxy silane.

63. (Previously presented) The method of claim 23 wherein the silane comprises glycidoxypropyltrimethoxysilane.

64. (Previously presented) The method of claim 23 wherein the metal surfaces comprises nickel clad stainless steel over which the curable adhesive composition is received.

65. (Previously presented) The method of claim 51 wherein the interfaces of the first and second nodes comprise opposing surface areas, and wherein an entirety of the curable adhesive composition is interposed within the respective opposing surface areas.

66. (Previously presented) The method of claim 53 wherein the interfaces of the first and second nodes comprise opposing surface areas, and wherein an entirety of the curable epoxy composition is interposed within the respective opposing surface areas.

67. (New) The method of claim 9 wherein the at least one component comprises a battery.

68. (New) The method of claim 9 wherein the at least one component comprises a button-type battery.

69. (New) The method of claim 9 wherein the at least one component comprises a thin-profile battery.

70. (New) The method of claim 9 wherein the component other than the at least one component comprises a flexible circuit substrate.

71. (New) The method of claim 9 wherein the electrically conductive bond comprises the sole physical support and connection interconnecting the first and second components.